

## ABSTRACT

Noise gain control within a communications receiver allows optimization of the receiver design without regard to the predetermined Automatic Gain Control set point. A noise gain controller is provided a copy of the received signal following AGC stages. A noise estimator determines the level of noise within the received signal and couples the noise level estimate to a noise gain discriminator that processes the noise level estimate to produce a gain correction factor. The gain correction factor is filtered and accumulated. The accumulated gain correction factor is used to scale the received signal. Subsequent receiver stages process the scaled received signal.

ET212955306US